

Electrical measurements

General information

Subject : VOLTANA EVO 1 - 16 Oslon Square Giant - Mean Well PLD 60W - 1050mA - CL I

Asked by : SZÜGYI János Péter

Created on : 11/01/2021

Started on : 19/01/2021

Test number : D210037

Sample(s) : E210027

Folder : P-F21002

Test conditions

Luminaire : VOLTANA EVO 1

Operator : Philippe Léonard

Number of LED : 16

LED : Osram OSOLON SQUARE GIANT

Driver : DRIVER_MEANWELL_PLD_60W_1050mA_220-277V_NONE_._. /
00-69-365

Number of driver(s) : 1

Driver current (mA) : 1050

SPD : VS SP3/230/10K/i

Conclusion



Informative

Conclusion :

PF : 0.97

Efficiency : 88.1%

THD : 15.1%

Harmonics : OK according to IEC 61000-3-2, Class C, P > 25 W (@100% dimming)

Validated by :

GHYSENS Gilles

Duplicate to : RACANELLI Frank, SZÜGYI János Péter,

HORVÁTH Csaba, CSIKÓS Balázs, BEDŐ Péter

LAB : 15/02/2021

D210037

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Test(s) details

Test(s)

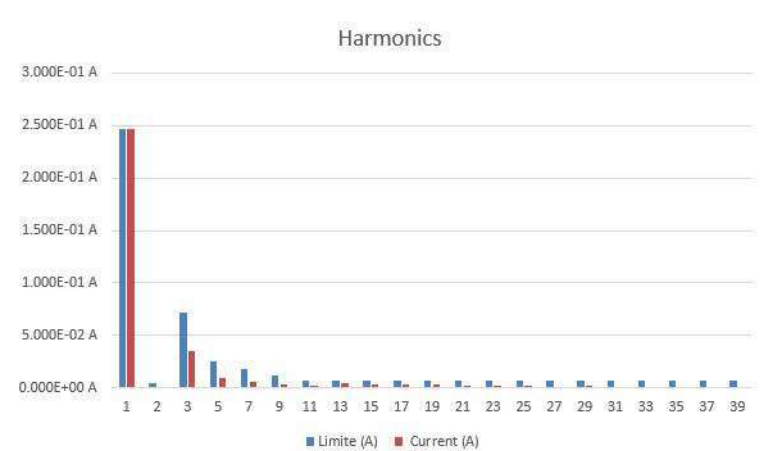
Name	Description	Result
Harmonics @ 1050mA	Measurement of the harmonic currents of the luminaire at thermal stabilization, according IEC 61000-3-2 - Class C (100% dimming).	Success
Measurements @ 1050mA	Characterization of the electrical parameters of the luminaire at thermal stabilization.	Informative

Harmonics @ 1050mA

Result(s)

Harmonic	Current (A)	Limite (A)
1	2.461E-01 A	2.461E-01 A
2	4.842E-04 A	4.923E-03 A
3	3.443E-02 A	7.188E-02 A
5	9.561E-03 A	2.461E-02 A
7	5.237E-03 A	1.723E-02 A
9	2.794E-03 A	1.231E-02 A
11	2.435E-03 A	7.384E-03 A
13	3.808E-03 A	7.384E-03 A
15	2.636E-03 A	7.384E-03 A
17	2.658E-03 A	7.384E-03 A
19	3.076E-03 A	7.384E-03 A
21	1.850E-03 A	7.384E-03 A
23	2.231E-03 A	7.384E-03 A
25	1.910E-03 A	7.384E-03 A
27	1.214E-03 A	7.384E-03 A
29	1.491E-03 A	7.384E-03 A
31	1.070E-03 A	7.384E-03 A
33	8.259E-04 A	7.384E-03 A
35	1.142E-03 A	7.384E-03 A
37	5.081E-04 A	7.384E-03 A
39	5.049E-04 A	7.384E-03 A

Annex(es)



Harmonics

Measurements @ 1050mA

Result(s)

input		output 1		
Urms	230.0 V	Urms	46.3 V	-
Irms	0.249 A	Irms	1.078 A	
Prms	55.8 W	Prms	49.1 W	
S	57.3 VA			
Q	-13.1 VAR			
PF	0.9734			
I(H01)	0.246 A	Uavg	46.3 V	
Cos j (H01)	0.9845	Iavg	1.056 A	
η rms	88.1%	Pavg	48.9 W	
η avg	87.8%			
THD	15.1%			

Test room temperature (°C) :

25.6

Measurement equipment :

Norma 4000 (E110)

APT (E102)

Quantities measured :

Qualification of the thermal limits and measurement of the electrical behavior of a luminaire according to PT-S-07

Uncertainties :

Statement of uncertainties (K=2, 95% of confidence level):

Temperature: 0,6 K

Voltage (AC): 0,33%

Current (AC): 0,33 %

Power (AC): 0,27%

Voltage (DC): 0,3 %

Current (DC): 0,3%

Power (DC): 0,23%

Anemometer: ± 0,27 m/s

Decision rules :

No pass/fail criteria applied on electrical measurements

End of test report :
